IN THE SPECIFICATION

Page 2, lines 9-11, please delete this paragraph and substitute the following:

Serial No. 09/614,224, filed July[[,]] 12, 2000, by Larry A. Coldren et al., now U.S. Patent 6,654,400, issued November 25, 2003, and entitled "METHOD OF MAKING A TUNABLE LASER SOURCE WITH INTEGRATED OPTICAL AMPLIFIER";

Page 2, lines 12-14, please delete this paragraph and substitute the following:

Serial No. 09/614,377, filed July[[,]] 12, 2000, by Larry A. Coldren et al., now U.S. Patent 6,580,739, issued June 17, 2003, and entitled "INTEGRATED OPTO-ELECTRONIC WAVELENGTH CONVERTER ASSEMBLY";

Page 2, lines 15-17, please delete this paragraph and substitute the following:

Serial No. 09/614,376, filed July[[,]] 12, 2000, by Larry A. Coldren et al., now U.S. Patent 6,614,819, issued September 2, 2003, and entitled "METHOD OF CONVERTING AN OPTICAL WAVELENGTH WITH AN OPTO-ELECTRONIC LASER WITH INTEGRATED MODULATOR";

Page 2, lines 18-19, please delete this paragraph and substitute the following:

Serial No. 09/614,378, filed July[[,]] 12, 2000, by Larry A. Coldren et al., now U.S. Patent 6,628,690, issued September 30, 2003, and entitled "OPTO-ELECTRONIC LASER WITH INTEGRATED MODULATOR";

Page 2, lines 20-22, please delete this paragraph and substitute the following:

Serial No. 09/614,895, filed July[[,]] 12, 2000, by Larry A. Coldren, now U.S. Patent 6,349,106, issued February 19, 2002, and entitled "METHOD FOR CONVERTING AN OPTICAL WAVELENGTH USING A MONOLITHIC WAVELENGTH CONVERTER ASSEMBLY";

Page 2, lines 23-24, please delete this paragraph and substitute the following:

Serial No. 09/614,375, filed July[[,]] 12, 2000, by Larry A. Coldren, now U.S. Patent 6,658,035, issued December 12, 2003, and entitled 'TUNABLE LASER SOURCE WITH INTEGRATED OPTICAL AMPLIFIER";

Page 2, lines 25-27, please delete this paragraph and substitute the following:

Serial No. 09/614,195, filed July[[,]] 12, 2000, by Larry A. Coldren et al., now U.S. Patent 6,574,259, issued June 3, 2003, and entitled "METHOD OF MAKING [[AND]] AN OPTO-ELECTRONIC LASER WITH INTEGRATED MODULATOR";

Page 2, lines 28-30, please delete this paragraph and substitute the following:

Serial No. 09/614,665, filed July[[,]] 12, 2000, by Larry A. Coldren et al., now U.S. Patent 6,687,278, issued February 3, 2004, and entitled "METHOD OF GENERATING AN OPTICAL SIGNAL WITH A TUNABLE LASER SOURCE WITH INTEGRATED OPTICAL AMPLIFIER"; and

Page 3, lines 1-3, please delete this paragraph and substitute the following:

Serial No. 09/614,674, filed July[[,]] 12, 2000, by Larry A. Coldren, now U.S. Patent 6,624,000, issued September 23, 2003, and entitled "METHOD FOR MAKING A MONOLITHIC WAVELENGTH CONVERTER ASSEMBLY";

Page 7, lines 23-30, to page 8, lines 1-24, please delete this paragraph and substitute the following:

Currents and voltages are applied and/or monitored at the optional sections to monitor power or wavelength, or provide amplification or modulation as specified in the following U.S. utility patent applications: Serial No. 09/614,224, filed July[[,]] 12, 2000, by Larry A. Coldren et al, now U.S. Patent 6,654,400, issued November 25, 2003, and entitled "METHOD OF MAKING A TUNABLE LASER SOURCE WITH INTEGRATED OPTICAL AMPLIFIER"; Serial No. 09/614,377, filed July[[,]] 12, 2000, by Larry A. Coldren, now U.S. Patent 6,580,739, issued June 17, 2003, and entitled "INTEGRATED OPTO-ELECTRONIC WAVELENGTH CONVERTER ASSEMBLY"; Serial

No. 09/614,376, filed July[[,]] 12, 2000, by Larry A. Coldren et al., now U.S. Patent 6,614,819, issued September 2, 2003, and entitled "METHOD OF CONVERTING AN OPTICAL WAVELENGTH WITH AN OPTO-ELECTRONIC LASER WITH INTEGRATED MODULATOR"; Serial No. 09/614,378, filed July[[,]] 12, 2000, by Larry A. Coldren et al, now U.S. Patent 6,628,690, issued September 30, 2003, and entitled "OPTO-ELECTRONIC LASER WITH INTEGRATED MODULATOR"; Serial No. 09/614,895, filed July[[,]] 12, 2000, by Larry C. Coldren et al., now U.S. Patent 6,349,106, issued February 19, 2002, and entitled "METHOD FOR CONVERTING AN OPTICAL WAVELENGTH USING A MONOLITHIC WAVELENGTH CONVERTER ASSEMBLY"; Serial No. 09/614,375, filed July[[,]] 12, 2000, by Larry A. Coldren et al., now U.S. Patent 6,658,035, issued December 2, 2003, and entitled "TUNABLE LASER SOURCE WITH INTEGRATED OPTICAL AMPLIFIER"; Serial No. 09/614,195, filed July[[,]] 12, 2000, by Larry A. Coldren et al., now U.S. Patent 6,574,259, issued June 3, 2003, and entitled "METHOD OF MAKING [[AND]] AN OPTO-ELECTRONIC LASER WITH INTEGRATED MODULATOR"; Serial No. 09/614,665, filed July[[,]] 12, 2000, by Larry A. Coldren et al., now U.S. Patent 6,687,278, issued February 3, 2004, and entitled "METHOD OF GENERATING AN OPTICAL SIGNAL WITH A TUNABLE LASER SOURCE WITH INTEGRATED OPTICAL AMPLIFIER", and Serial No. 09/614,674, filed July[[,]] 12, 2000, by Larry A. Coldren, now U.S. Patent 6,624,000, issued September 23, 2003, and entitled "METHOD FOR MAKING A MONOLITHIC WAVELENGTH CONVERTER ASSEMBLY"; all of which are incorporated by reference herein, all of which are continuation-in-parts of the others, and all of which claim the benefit under 35 U.S.C. §119(e) to the following U.S. provisional patent applications: Serial No. 60/152,038, filed on September 2, 1999, by Gregory Fish et al., and entitled "OPTOELECTRONIC LASER WITH INTEGRATED MODULATOR"; Serial No. 60/152,049, filed on September 2, 1999, by Larry Coldren, and entitled "INTEGRATED OPTOELECTRONIC WAVELENGTH CONVERTER"; and Serial No. 60/1523,072, filed on September 2, 1999, by Beck Mason et al., and entitled "TUNABLE LASER SOURCE WITH INTEGRATED OPTICAL AMPLIFIER." The current invention operates under the same general principles and techniques as these previous background inventions.

Page 13, lines 10-20, please delete this paragraph and substitute the following:

The analysis indicates that optimal values for the SCH bandgap is 1 to 2 kT (or 26 to 52 meV larger in energy than the lasing energy), or about 50 to 100 nm lower in wavelength near 1550 nm. The lasing energy is typically approximately equal to the lowest calculated subband transition energy in the quantum-well with no pumping. Bandgap shrinkage reduces the bandgap and this lowest subband energy about 30 meV at typical threshold carrier densities, and the lineshape rounding and state filling combine to put the typical lasing wavelength back at about the same point as the carrier-free calculated subband edge. This separation between the lasing energy and the SCH waveguide absorption edge is much smaller than normal in typical multiple-quantum-well-SCH lasers, where it is usually desired to have good carrier confinement to the quantum wells. The separation results in a gain vs current density characteristic that saturate at relatively low values.

Page 17, lines 24-30, to page 18, lines 1-25, please delete this paragraph and substitute the following:

As will be evident to those skilled in the art, the principle of the foregoing embodiments of this invention may also be used in creating optimized integrated amplifiers and modulators, as have been described in commonly-assigned and co-pending U.S. utility patent applications, Serial No. 09/614,224, filed July[[,]] 12, 2000, by Larry A. Coldren et al, now U.S. Patent 6,654,400, issued November 25, 2003, and entitled "METHOD OF MAKING A TUNABLE LASER SOURCE WITH INTEGRATED OPTICAL AMPLIFIER"; Serial No. 09/614,377, filed July[[,]] 12, 2000, by Larry A. Coldren, now U.S. Patent 6,580,739, issued June 17, 2003, and entitled "INTEGRATED OPTO-ELECTRONIC WAVELENGTH CONVERTER ASSEMBLY"; Serial No. 09/614,376, filed July[[,]] 12, 2000, by Larry A. Coldren et al., now U.S. Patent 6,614,819, issued September 2, 2003, and entitled "METHOD OF CONVERTING AN OPTICAL WAVELENGTH WITH AN OPTO-ELECTRONIC LASER WITH INTEGRATED MODULATOR"; Serial No. 09/614,378, filed July[[,]] 12, 2000, by Larry A. Coldren et al, now U.S. Patent 6,628,690, issued September 30, 2003, and entitled "OPTO-ELECTRONIC LASER WITH INTEGRATED MODULATOR"; Serial No. 09/614,895, filed July[[,]] 12, 2000, by Larry C. Coldren et al., now U.S. Patent 6,349,106, issued February 19, 2002, and entitled "METHOD FOR CONVERTING AN OPTICAL WAVELENGTH USING A MONOLITHIC WAVELENGTH CONVERTER ASSEMBLY"; Serial No. 09/614,375, filed July[[,]]

12, 2000, by Larry A. Coldren et al., now U.S. Patent 6,658,035, issued December 2, 2003, and entitled "TUNABLE LASER SOURCE WITH INTEGRATED OPTICAL AMPLIFIER"; Serial No. 09/614,195, filed July[[,]] 12, 2000, by Larry A. Coldren et al., now U.S. Patent 6,574,259, issued June 3, 2003, and entitled "METHOD OF MAKING [[AND]] AN OPTO-ELECTRONIC LASER WITH INTEGRATED MODULATOR"; Serial No. 09/614,665, filed July[[,]] 12, 2000, by Larry A. Coldren et al., now U.S. Patent 6,687,278, issued February 3, 2004, and entitled "METHOD OF GENERATING AN OPTICAL SIGNAL WITH A TUNABLE LASER SOURCE WITH INTEGRATED OPTICAL AMPLIFIER", and Serial No. 09/614,674, filed July[[,]] 12, 2000, by Larry A. Coldren, now U.S. Patent 6,624,000, issued September 23, 2003, and entitled "METHOD FOR MAKING A MONOLITHIC WAVELENGTH CONVERTER ASSEMBLY"; all of which are incorporated by reference herein, all of which are continuation-in-parts of the others, and all of which claim the benefit under 35 U.S.C. §119(e) to the following U.S. provisional patent applications: Serial No. 60/152,038, filed on September 2, 1999, by Gregory Fish et al., and entitled "OPTOELECTRONIC LASER WITH INTEGRATED MODULATOR"; Serial No. 60/152,049, filed on September 2, 1999, by Larry Coldren, and entitled "INTEGRATED OPTOELECTRONIC WAVELENGTH CONVERTER"; and Serial No. 60/1523,072, filed on September 2, 1999, by Beck Mason et al., and entitled "TUNABLE LASER SOURCE WITH INTEGRATED OPTICAL AMPLIFIER."